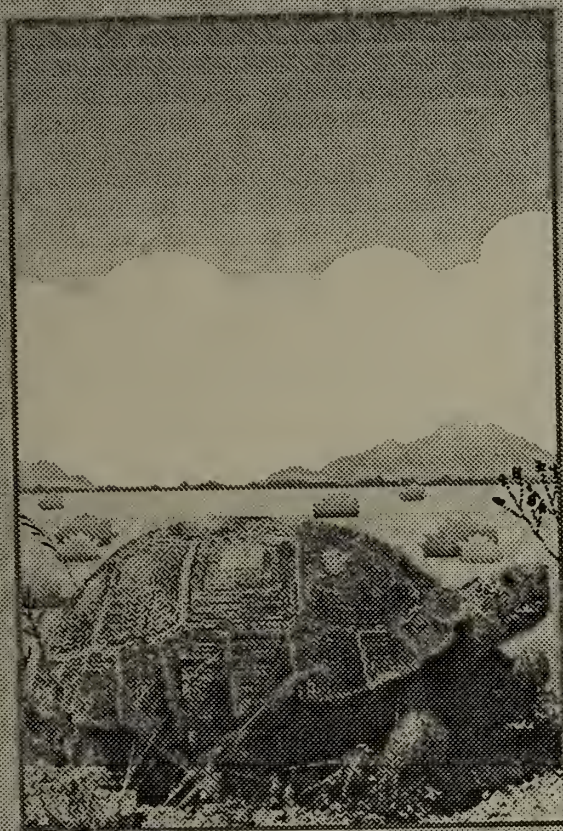




Answering Questions About Desert Tortoises:



A Guide For
People Who
Work With
The Public
In California



Department of Parks & Recreation

Bureau of Land Management
in cooperation with the
California Department of Parks & Recreation

QL
666
.C584
B477
1993
c.2

BLM Mission Statement

The Bureau of Land Management is responsible for the balanced management of Public Lands and resources and their various values so that they are considered in a combination that will best serve the needs of the American people. Management is based upon the principles of multiple use and sustained yield; a combination of uses that takes into account the long-term needs of future generations for renewable and nonrenewable resources. These resources include recreation, range, timber, minerals, watershed, fish and wildlife, wilderness, and natural, scenic, scientific and cultural values.

BLM-CA-PT-93-003-6840

ID 8602933

76
60
1958
1959
1960
2

ANSWERING QUESTIONS ABOUT DESERT TORTOISES:

A GUIDE FOR PEOPLE WHO WORK WITH THE PUBLIC

IN CALIFORNIA

BLM LIBRARY
SC-653, BLDG. 50
DENVER FEDERAL CENTER
P. O. BOX 25047
DENVER, CO 80225-0047

prepared by

KRISTIN H. BERRY, PH.D.

Bureau of Land Management
6221 Box Springs Boulevard
Riverside, California 92507

The Bureau of Land Management gratefully acknowledges the California Department of Parks and Recreation, who provided a grant for printing and distribution.

January 1993

ACKNOWLEDGEMENTS

Many people assisted with locating and compiling information, including Judy Hohman of the Fish and Wildlife Service, Frank Hoover and Mike McBride of the California Department of Fish and Game, Dr. Marc Graff of the California Turtle and Tortoise Club, Terrie Correll of The Living Desert and the Desert Tortoise Council, Jayne Chavez-Scales of the Desert Tortoise Preserve Committee, and Betty Burge of Tortoise Group in Nevada. The Desert Tortoise Preserve Committee compiled a major part of the initial mailing list. Don Armentrout, Wes Chambers, Larry Foreman, Al Pfister, and Alden Sievers of the Bureau of Land Management, and Ray Bransfield of the Fish and Wildlife Service made significant contributions. Carolyn Kameen assisted with editing, word processing, and verified numerous addresses and phone numbers. Countless government employees have used the draft version since 1990 and provided ideas for helpful revisions and additions. The California Department of Parks and Recreation provided funds for printing and mailing under an agreement with the Bureau of Land Management.

TABLE OF CONTENTS

	Page Number
Acknowledgements	i
Table of Contents	ii
Chapter 1. The Desert Tortoise, Our State Reptile, is in Trouble	1
You, as a Person Who Provides Information to the Public, Can Help in Many Ways	1
How to Use This Booklet	1
Why the Desert Tortoise is in Trouble	2
Chapter 2. Laws to Protect Our Desert Tortoises	3
Laws Regarding Wild and Captive Tortoises Are Different	3
Registration of Captive Tortoises is Required	3
Transferring Captive Tortoises from One Household to Another	4
Captive Tortoises Must Not Be Released to the Wild Under Any Conditions	4
What to do When Someone Takes a Tortoise from the Desert	5
Chapter 3. General Information About Desert Tortoises:	
Responses to the Most Frequently Asked Questions	9
Chapter 4. If you Find a Tortoise While in the Desert	15
What to do if You See a Tortoise Crossing the Road	15
What to do if You Find a Tortoise Injured on the Road	15
What to do if You Find a Tortoise in a Residential Area of a Desert Town	16
How to Protect Tortoises When You Visit the Desert	17
Chapter 5. Management of Captive Tortoises: Lost Tortoises, Adoptions, Husbandry, and Health	19
Captive Tortoises May be Possessed Legally	19
Captive Tortoises Must Not be Released to the Wild	19
What to do if You Find a Tortoise in a Non-Desert City or Town	20
Adopting a Captive Tortoise for a Pet	21
Tortoise Husbandry	22
The Ill or Injured Captive Tortoise	22

Chapter 6. Government Agencies with Responsibilities for Managing Desert Tortoises	23
California Department of Fish and Game	23
Bureau of Land Management	24
Fish and Wildlife Service	25
Chapter 7. Organizations with Expertise on Desert Tortoises	27
Major Nonprofit Conservation and Education Organizations	28
California Turtle and Tortoise Club	28
Desert Tortoise Preserve Committee	30
Desert Tortoise Council	31
Tortoise Group	32
Other Organizations	33
Appendix 1. Excerpts from Federal and State Laws	34
Appendix 2. List of Veterinarians	36

CHAPTER 1

THE DESERT TORTOISE, OUR STATE REPTILE, IS IN TROUBLE

YOU, AS A PERSON WHO PROVIDES INFORMATION TO THE PUBLIC, CAN HELP IN MANY WAYS...

This booklet was designed to help you help the tortoise. Using the material in the following chapters, you can tell people what the laws are, how to protect wild tortoises, where to take captive tortoises, how to adopt a captive tortoise, what to do when a tortoise is found, and how to avoid activities that will harm tortoises.

The booklet is being distributed to government employees and other persons perceived by the general public to be knowledgeable about laws and protocols. It is intended for staff in city, county, State, and Federal offices, as well as some individuals in the business community. Examples of the types of people who use the booklet are law enforcement officers, animal control officers, humane society staff, wildlife rescue experts, librarians, veterinarians, and mayors of cities and towns in the desert. People in these positions can play a major role in saving desert tortoise populations, especially when dealing with the subject of captive tortoises.

HOW TO USE THE BOOKLET

When someone contacts you, scan the Table of Contents and leaf through the booklet to find the appropriate section. You can tell them the answer, or when the response is quite technical, read the material directly to the interested party.

If you have suggestions and revisions, please write to:

Bureau of Land Management
ATTN: Desert Tortoise Program
6221 Box Springs Boulevard
Riverside, CA 92507-0714
(909) 697-5360

WHY THE DESERT TORTOISE IS IN TROUBLE

Tortoise populations have been declining for decades because of collecting, vandalism, loss of habitat, and disease. Government agencies have recognized the problems facing this species for many years. In 1939, 1961, 1972, and 1973, the California Fish and Game Commission developed special laws to protect wild tortoises from collecting, harassment, and shooting. In June 1989, the Fish and Game Commission listed the tortoise as a **threatened** species under the California Endangered Species Act.

Federal agencies have recognized population declines since 1980, when the Bureau of Land Management listed the tortoise as a "sensitive species." In 1985 the U.S. Fish and Wildlife Service determined that the tortoise deserved Federal listing as a threatened or endangered species. Between 1985 and 1989, tortoise populations continued to decline precipitously in several parts of their geographic range. The Fish and Wildlife Service listed the tortoise as **endangered** on an emergency basis on August 4, 1989 for 240 days. On April 2, 1990, the Fish and Wildlife Service issued a final rule listing the desert tortoise as **threatened**. The **threatened** listing specifically covers wild tortoise populations occurring north and west of the Colorado River and Grand Canyon complex.

Many people ask why desert tortoise populations have declined. They assume a single or primary cause. There is no single or primary cause. The situation is highly complex and varies from site to site and region to region. In most cases, there are many causes for the declines. The following is a general list of typical problems:

- illegal collecting
- vandalism
- disease
- persistent drought
- release of captive tortoises
- attacks by domestic and feral dogs
- predation by ravens
- agricultural development
- urban growth
- landfills and illegal dumps
- fire
- livestock grazing
- railroads, roads, highways, and freeways
- general recreation and off-highway vehicle recreation
- utility lines and corridors
- exploration and development of geothermal, oil, and gas resources
- mineral exploration and development
- military activities

CHAPTER 2

LAWS TO PROTECT OUR DESERT TORTOISES

LAWS REGARDING WILD AND CAPTIVE TORTOISES ARE DIFFERENT

Wild Tortoises. Desert tortoises must not be taken from the desert, because the tortoise is State- and Federally-listed as a ***threatened*** species. People can be fined for collecting, harassing, shooting, harming, or purchasing a desert tortoise under existing State regulations, the California Endangered Species Act, and the Federal Endangered Species Act of 1973 (as amended). The penalties include a State fine of a maximum of \$5,000 or a year in jail or both, as well as Federal fines and jail sentences. Civil penalties for knowingly violating Federal laws can be up to \$25,000 for each violation. For criminal violations, fines can be up to \$50,000 for each violation or not more than one year in prison, or both. Details of fines are described in Appendix 1 in excerpts from the Endangered Species Act of 1973 (as amended) and the California Fish and Game Code.

Captive Tortoises. *Captive tortoises and their progeny can continue to be kept as pets.* In 1972 and 1973, the California Fish and Game Commission passed special laws to permit people who had desert tortoises in their possession prior to March 1973 to keep these captives. In doing so, the Commission recognized that many people had held tortoises in captivity for decades or had offspring of captive tortoises. The Federal Endangered Species Act does not conflict with the California Program for captives. Under the Act, captive tortoises and their progeny are to be maintained under normal husbandry practices.

REGISTRATION OF CAPTIVE TORTOISES IS REQUIRED

Individuals with legal captives must have the tortoises registered with the California Fish and Game Department. The progeny of legally acquired captives must also be registered. The Department issues stickers similar to car license plate stickers for each captive tortoise. There is no charge for registration. To obtain a registration form, write to Ginger and Gary Wilfong, who are the registration agents for the California Department of Fish and Game at the address and phone shown on the next page:

The Wilfongs, Adoption Program
California Turtle and Tortoise Club
P.O. Box 2005
Castro Valley, CA 94546-0005
(510) 886-2946

TRANSFERRING CAPTIVE TORTOISES FROM ONE HOUSEHOLD TO ANOTHER

Under the California Department of Fish and Game Code, captive tortoises cannot be transferred from one person or household to another *without the permission of the Department*. To obtain permission to transfer a captive, write to the Wilfongs at the address shown in the section above. As agents for the Department of Fish and Game, they will assist in processing the necessary papers.

CAPTIVE TORTOISES MUST NOT BE RELEASED TO THE WILD

UNDER ANY CONDITIONS

Release of captive tortoises into the wild is a violation of the Federal Endangered Species Act under the section on "take," which includes capturing, pursuing, shooting, harming and harassing. Now that the desert tortoise is Federally listed as a threatened species, some owners of captives may not want to keep their pets. They may be concerned about having an unregistered tortoise or an illegal captive. Some illegally held captives have actually been in captivity for many years.

Even if the captive is not registered or has been in captivity illegally, it cannot be returned to the wild. It must be placed in a government-approved Adoption Program. See previous section, as well as Chapter 5. You can help the tortoise and protect wild populations by ensuring that captives are not released. You may have to use your best communication skills with the public to do so.

One major cause of declines in wild tortoise populations is upper respiratory tract disease. This disease, which experts believe was probably introduced through releases of ill captive tortoises, is highly infectious to tortoises and almost always fatal. The disease is sweeping large parts of the desert and is causing extraordinarily high mortality rates. In some parts of the desert, 90% of the tortoises appear to have died in the last four years from the disease.

Please emphasize to all who request information (and to those that don't):

- (1) The upper respiratory tract disease is caused by a very small bacteria, a bacteria in the group called *Mycoplasma*. The bacteria was identified in 1992 as the cause of the disease by a team of veterinary research scientists at the University of Florida. Their research was supported in part by funds from the California Department of Fish and Game and the Bureau of Land Management.
- (2) There is absolutely no evidence that the upper respiratory disease found in tortoises (symptoms include wet or runny nose, sniffles, lethargy) is harmful or contagious to people. The pathogen appears to be specific to tortoises and possibly some other reptiles. The upper respiratory tract disease has been well-known in captive tortoise populations for decades and has not caused harm to people.
- (3) Many captives have upper respiratory tract disease and other diseases but appear to be healthy. A large portion of the captive population may be silent carriers of the disease. Veterinarians cannot confirm whether a tortoise has the upper respiratory tract disease without special tests.
- (4) Unlike wild tortoises, captives with signs of the disease can be kept alive and healthy through good husbandry practices for many years. Such captives should be provided with adequate high-quality food and water.

Therefore, captive tortoises must not be released to wild populations under any circumstances. An adoptive home can be found for any captive tortoise that is no longer wanted (see Chapter 5).

WHAT TO DO WHEN SOMEONE TAKES A TORTOISE FROM THE DESERT

Some of us know people who have taken a tortoise from the desert. **If the tortoise was collected prior to 1973 and has been a captive since that time, or is the offspring of such captives, the owner may possess it with a special permit** (see previous section of this chapter and Appendix 1). If, however, the collector has recently taken the tortoise from the desert, State and Federal laws have been violated and the collector is liable for prosecution. Telephone numbers of the two major wildlife law enforcement agencies, the California Department of Fish and Game and the Fish and Wildlife Service, are shown below. Please give both phone numbers to the people who call.

Violations of California State Laws can be reported by calling CALTIP at 800-952-5400, a special telephone number for reporting illegal collecting and poaching. If the violator is apprehended, the person making the telephone call may receive a reward. Callers can remain anonymous.

Federal law enforcement personnel can be contacted at the following address and telephone number:

Senior Resident Agent
U.S. Fish and Wildlife Service
Division of Law Enforcement
370 Amapola Avenue, Suite 114
Torrance, California 90501
(310) 297-0062

If the tortoise was collected a few days earlier and if the tortoise was held in isolation (e.g., in a cardboard box, no other captive tortoises or turtles present, and not placed in a yard or with any domestic pets), then experts in the U.S. Fish and Wildlife Service and California Department of Fish and Game may decide that the tortoise can be returned to the location from which it was taken.

Such a determination must be made with care, because of the potential to transmit the highly infectious and often fatal upper respiratory tract disease to wild tortoise populations (see paragraphs above for description of disease). The decision on whether to return the wild tortoise to its home site can be made only by designated tortoise experts in certain offices, not even by a ranger or warden. Biological expertise is essential. Tortoise experts at one or more of the offices listed below should be contacted immediately:

U. S. FISH AND WILDLIFE SERVICE

*For Kern, San Bernardino,
Los Angeles, and Inyo counties
contact:*

Field Supervisor
Fish and Wildlife Service
2140 Eastman Avenue, Suite 100
Ventura, CA 93003
(805) 644-1766

*For Riverside, Imperial, and San Diego
counties contact:*

Field Supervisor
Fish and Wildlife Service
2730 Loker Avenue West
Carlsbad, California 92008
(619) 431-9440

CALIFORNIA DEPARTMENT OF FISH AND GAME

Frank Hoover
Chino Fish and Wildlife Base
4775 Bird Farm Road
Chino, California 91709
(909) 597-8235

If no one is available at the above offices, call the Bureau of Land Management, California Desert District Office in Riverside, at (909) 697-5360. The government agencies may alter the official position on this topic as more information becomes available on contagious diseases.

If wild tortoises have been held in captivity in the presence of other tortoises or turtles, they must not be returned to the wild for any reason. A wild tortoise held in captivity for even a few hours is likely to have been exposed to contagious diseases. Examples of exposure may include contact with tortoises or turtles carrying diseases with no outward sign of illness and contact with yards or pens where tortoises have been sick, even several years ago. **REMEMBER: Some diseases are highly infectious and fatal. Don't take a chance of exposing our wild populations.**

CHAPTER 3

GENERAL INFORMATION ABOUT DESERT TORTOISES: RESPONSES TO THE MOST FREQUENTLY ASKED QUESTIONS

*prepared by Kristin H. Berry**

1. What is the difference between a turtle and a tortoise?

In the United States the following distinction is made between the terms turtle and tortoise:

- A tortoise is a land dwelling turtle with high domed shell and columnar, elephant-shaped hind legs. Tortoises go to water only to drink or bathe.
- In contrast, the word "turtle" is used for other turtles: pond turtles, river turtles, box turtles, musk turtles, sea turtles, etc.

2. How many different kinds of tortoises occur in North America?

Three species of tortoises occur in the United States and a fourth is found in Mexico. The desert tortoise (*Gopherus [Xerobates] agassizii*) is found in the Mojave and Colorado/Sonoran deserts of California, southern Nevada, Arizona, southwestern Utah, and in Mexico. The Texas tortoise (*Gopherus [Xerobates] berlandieri*) occurs in southern Texas and northeastern Mexico. Some can be found in California, where they were sold in the past for pets. The third U. S. species is the gopher or Florida tortoise (*Gopherus polyphemus*), which lives in southwestern South Carolina, Florida, Georgia, Alabama, Mississippi, Louisiana, and extreme southeastern Texas. The fourth species is the bolson tortoise (*Gopherus flavomarginatus*), which is found in a very small area in Chihuahua and Durango, Mexico.

*Prepared for the Desert Tortoise Preserve Committee, Inc. and used with permission.

3. **What is the habitat of the desert tortoise in the southwestern U.S.?**

Tortoises occupy a wide variety of habitats in the United States. Two generalizations can be made. Tortoises living north and west of the Colorado River-Grand Canyon complex (California, southern Nevada, southwestern Utah, and extreme northern Arizona) occur in valleys, flat areas, fans, bajadas and washes. These tortoises live in the Mojave and Colorado deserts and are generally found below 4,000 feet in tree yucca (Joshua tree and Mojave yucca) communities, creosote bush and saltbush scrub habitats, and in some ocotillo-creosote habitats. They occupy a wide variety of soil types, ranging from sand dunes to rocky hillsides, and from caliche caves in washes to sandy soils and desert pavements. The tortoise must have suitable soils and terrain for constructing a burrow and must have adequate annual and perennial plants in the spring and/or summer for forage.

Tortoises living in the Sonoran Desert of Arizona occupy entirely different habitats. They are found on the steep, rocky slopes of hillsides. The slopes may be covered with granitic or volcanic boulders and are often covered with dense vegetation. The palo verde-saguaro cactus is the most frequently occupied habitat, although some tortoises are found in oak woodlands and stands of heavy bunch grass.

4. **When can one see tortoises in the California deserts? When are they active?**

In general, tortoises hibernate from October through February and are underground in burrows during that time. On a warm, sunny day an occasional animal may be found near the mouth of its burrow in late fall or winter.

The prime activity period is late winter and spring, from mid to late March through May. In early spring, tortoises are out from mid-morning to mid-afternoon, during the warm part of the day. As air temperatures rise, tortoises emerge from burrows earlier and retreat earlier. By May, tortoises may be out by 6:00 a.m. and back in burrows by 9:00 a.m. In late spring, tortoises may also be active in late afternoon.

After May, when daytime air and soil temperatures are over 90 degrees Fahrenheit and the food supplies of herbaceous plants and grasses have dried, a large percentage of tortoises become inactive and remain underground in burrows. Some will emerge a few times a week or once every two or three weeks, especially in early morning or late afternoon. Others will not come out of burrows until summer thundershowers trigger a brief flurry of above-ground activity. With summer rains, the tortoises will emerge from burrows to drink, travel, and eat.

5. **What is hibernation and what do tortoises do when they hibernate?**

For a tortoise, hibernation is a period of inactivity, generally below ground in a burrow or den. The body temperature is lowered close to that of the air temperature in the burrow, about 40 to 60 degrees Fahrenheit. The heart rate, respiration rate, and all bodily processes are slowed.

6. **What do tortoises eat in the wild?**

Tortoises are selective in choice of foods. Food preferences depend on locality and availability of the food items. In general, tortoises in California feed on herbaceous perennial [perennial plants live for more than one year] and annual wildflowers, such as wishbone bushes, lotus, loco weeds, spurges, blazing stars, lupines, Indian wheat, forget-me-nots, desert dandelions, gillias, phacelias, coreopsis, and many other species. They also eat annual and perennial grasses and fresh pads and buds of some species of cactus. They do not eat shrubs such as creosote bush and burro bush.

Consumption of dried plants is somewhat dependent on the tortoise's state of hydration. Tortoises will eat dried annual plants and grasses throughout late spring and into summer and fall, if, for example, they have recently consumed rain water.

7. **Do tortoises drink water in the wild?**

Yes. Tortoises drink free water where it collects in pools near rocks or in depressions. Tortoises will dig depressions to collect the water, and such depressions can often be seen on areas of desert pavement.

Tortoises can store water in their bladders, where it can be reabsorbed. During spring, summer, and fall rains, tortoises will drink and "freshen" the water stored in their bladders. Bladder water varies from colorless to dark brown. Fresh water is clear and colorless; water that has been stored for some time is dark and concentrated.

8. **When do females lay eggs and where?**

In the wild, females usually lay one or more clutches of 1 to 12 eggs between mid-April and mid-July. The size of the clutch depends on the size of the female, with small females producing smaller clutches than the larger females. Clutch size and numbers of clutches produced also can depend on the food supply--how much food the tortoise has been able to obtain during the year or two prior to the time the clutch is deposited. Females dig the nests with the hind legs and drop the

eggs into the nest, placing them with their hind legs and covering them carefully. The location of an undisturbed nest cannot be detected by humans.

Nests are most often associated with the female's burrows. The nest may be in the burrow mound, the mouth of the burrow, or deep inside the tunnel.

9. How much time is required for eggs to hatch?

The eggs, which are the shape and size of ping pong balls, may hatch in 70 to 120 days. The timing depends on the location of the nest and how much warmth it receives, among other factors. Some clutches may over-winter underground and hatch in the spring.

10. How large is the largest known desert tortoise? How are tortoises measured?

The largest known captive desert tortoise in California was a male about 15 inches in length. Known as "Max," the tortoise became the property of the California Department of Fish and Game in the 1970's. Max finally died and has been freeze-dried for exhibits. An even larger captive tortoise is a 17.3-inch male, who lives with his proud owners in Las Vegas.

Two wild desert tortoises vie for record sizes: a 14.5-inch male on the Desert Tortoise Natural Area, and a 15-inch female in Lucerne Valley.

Tortoises are measured with calipers, instruments consisting of a pair of movable curved legs fastened together at one end and used to measure the length of the shell. One end of the caliper is placed at the edge of the carapace (upper shell) immediately above the head and the other end is placed on the carapace edge above the tail. The straight line distance is considered the length of the shell or carapace at the midline of the body.

11. What are tortoise burrows like?

Tortoise burrows vary considerably in length and type. The style of burrow appears to be dependent upon the region, soil type, and vegetation in which it is found. For example burrows in the eastern Mojave Desert of Utah are of two basic types: deep winter dens in caliche caves in washes, some of which are 30 feet in length; and shallower summer burrows three to six feet in length in the flat areas. In the western Mojave Desert, tortoises have a variety of burrows. They use burrows about 2.5 to 10 feet in length for summer estivation and winter hibernation. They may also use shallower burrows or pallets that just barely cover the shell in spring, summer, and fall also. These temporary burrows or pallets can be fragile and may be used for shelter for a few days while a tortoise is foraging

in a particular area. A temporary burrow usually lasts from a few weeks to a season and then disintegrates.

Each tortoise usually has more than one burrow. The number of burrows the tortoise uses may depend on age and sex, as well as on the season. The burrow is usually the size and shape of the tortoise--half moon in shape and flat on the bottom. Small tortoises have small burrows and large tortoises have large burrows.

12. Why are tortoise burrows important?

The tortoise burrow provides protection from the extremes of heat, cold, lack of moisture, and too much moisture. The burrow is especially important because it provides a cool place for the tortoise during the dry hot days in late spring and summer when water and food are unavailable and a relatively "warm" site for winter hibernation. The tortoise spends most of its life in the burrow.

Burrows serve as protection from predators, such as common ravens, coyotes, kit foxes, golden eagles, and greater roadrunners.

13. Do tortoises migrate?

Migration refers to movement to a particular place for a particular purpose, such as feeding or breeding, and then return to the former site. Migration is not an appropriate term to use for tortoise movements. Each tortoise has a home range or activity area. A home range is the area in which a tortoise travels, feeds, sleeps, courts, and has its burrows. This is the area with which the tortoise is familiar. In general, large tortoises have large home ranges and small tortoises have small home ranges. Females are more sedentary than males, so they probably have smaller home ranges. Large males are known to occupy home ranges over 0.75 square mile.

Tortoises appear to have a good sense of compass direction. They are also very familiar with local landmarks. They can travel to find their burrows in a straight line. They also know locations of other tortoises (e.g., males know the location of females), drinking depressions, mineral licks (sites with deposits of calcium, sodium, magnesium and other salts), and particular food sources.

Some people, upon seeing tortoises cross roads in spring, think that tortoises are "migrating." Actually the tortoises are merely living in close proximity to the highways and roads and will travel across them during the course of moving about the home range.

14. When do tortoises court and mate?

Male tortoises generally court female tortoises whenever the opportunity presents itself, e.g., in spring, summer, or fall. There does not appear to be a well defined "mating season."

Male tortoises may court and mount the females, but not actually copulate. Don't assume that mating is occurring because you see a male mounted on a female.

15. How does one distinguish a male from a female tortoise?

Sex is difficult to determine until the tortoise is about seven inches in carapace length. The shape of the shell differs between male and female adults. The shell is composed of a domed roof or back called the carapace, and a flattened under portion called the plastron. The portion of the plastron immediately beneath the extended head and neck is called the gular horn. Male tortoises have a longer and upcurved gular horn, a concave plastron (a dish-shaped depression on the underside of the shell near the tail), a longer tail, and chin glands or knobs on the chin. Females may have longer toenails for digging nests, a small gular horn, a flat plastron, and no obvious chin glands.

16. What predators eat tortoises?

The type of predator varies depending on the age and size of the tortoise. There are egg predators such as the gila monster, kit fox, coyote, and badger. Predators of juveniles include ravens, roadrunners, some snakes, kit foxes, bobcats, badgers, coyotes, and probably the spotted skunk.

The larger the tortoise the more likely it will be able to resist predation. Large tortoises may be eaten by kit foxes, badgers, bobcats, coyotes, and golden eagles. The large mammalian predators are not likely to eat tortoises unless other food sources, such as rabbits and rodents, are in short supply. Coyotes and kit foxes may dig tortoises out of their burrows to eat. These predators can eat the tortoise without breaking open the shell.

CHAPTER 4

IF YOU FIND A TORTOISE WHILE IN THE DESERT...

WHAT TO DO IF YOU SEE A TORTOISE CROSSING THE ROAD

If you travel in the Mojave or Colorado deserts in spring, late summer, or fall, you might see tortoises crossing dirt or paved roads. Such tortoises are likely to be crushed by vehicles because they don't try to escape. When frightened, they withdraw into the shell and remain motionless and are likely to be hit by an oncoming car.

Stop your car in a safe place along the roadside. Approach the tortoise from the end of the shell with the head. Note the direction the tortoise was heading. Carry it carefully across the road in the same direction, and take it no more than 150 feet into the desert. If possible, place the tortoise in the shade. Carry the tortoise upright, in its normal walking position. Don't tip it from side to side or upside down. **If the tortoise becomes frightened, it may empty its bladder as a defense mechanism.** The loss of bladder fluids can place the tortoise under additional stress because tortoises store water in the bladder for use during the dry times of year.

WHAT TO DO IF A TORTOISE IS FOUND INJURED ON THE ROAD

Sometimes tortoises hit by vehicles are still alive. They may have been hit by a glancing blow, cracking the shell or receiving a similar minor injury. In the last 15 years, a few members of the public have contacted tortoise experts and biologists in federal and state agencies about an injured wild tortoise (the average number of calls is about three per year). In virtually all cases, the desert visitor has rescued an injured tortoise and wants to know what to do with it. Each case deserves special treatment. Immediately try to determine who currently has the tortoise, where the tortoise is located, where it was originally found, when it was rescued, and the signs of injury. Contact one of the following agencies for guidance on the next step:

CALIFORNIA DEPARTMENT OF FISH AND GAME

Frank Hoover
Chino Fish and Wildlife Base
4775 Bird Farm Road
Chino, California 91709
(909) 597-8235

U. S. FISH AND WILDLIFE SERVICE

*For Kern, San Bernardino,
Los Angeles, and Inyo counties
contact:*

Field Supervisor
Fish and Wildlife Service
2140 Eastman Avenue, Suite 100
Ventura, CA 93003
(805) 644-1766

*For Riverside, Imperial, and San Diego
counties contact:*

Field Supervisor
Fish and Wildlife Service
2730 Loker Avenue West
Carlsbad, California 92008
(619) 431-9440

If you cannot reach the above offices, call the Bureau of Land Management, California Desert District Office in Riverside, at (909) 697-5360. A list of veterinarians willing to treat tortoises is in Appendix 2.

The injury should not and cannot be used as a means of obtaining a pet. For example, healthy three-legged tortoises must not be taken from the wild. Tortoises with only three legs can do quite well in the wild. Even two-legged tortoises have been known to survive!

WHAT TO DO IF YOU FIND A TORTOISE IN A RESIDENTIAL AREA OF A DESERT TOWN

- *First, carefully evaluate the location.* The location of the tortoise will give you an important clue as to whether it is likely to be a wild tortoise or a captive. Tortoises found on the fringes of residential areas in desert towns (e.g., Barstow, Apple Valley, Victorville, etc.) are very likely to be wild tortoises. They may wander in and out of unfenced yards and along streets on the edge of the desert.
- *Second, without touching the tortoise check for signs of captivity, such as paint on or holes in the shell or a Fish and Game sticker (typical evidence of a captive).*

- *Third, if the tortoise shows no such signs of having been a captive, it should be treated as a wild tortoise.* If you find such a tortoise, do not handle it unless it is in immediate danger of being killed. Let it proceed on its way. If it is in imminent danger of being killed, pick it up carefully, keeping it in its normal, walking position, and carry it a few hundred yards to the edge of the desert. You will help to protect the tortoise by allowing it to remain a wild animal.

Some people try to use "tameness" to determine whether the tortoise is wild or a captive. Tameness is not a good criterion because there is such a wide variety of behaviors in both captives and wild tortoises. For example, many wild tortoises exhibit lack of fear and curiosity, and will walk up to a person, sniffing, and even stop to rest by him/her. In contrast, some captives are very shy and will withdraw tightly into the shell when an observer approaches.

If the tortoise is an obvious captive, follow the procedures described in Chapter 5, **If You Find a Lost Captive Tortoise.**

HOW TO PROTECT TORTOISES WHEN YOU VISIT THE DESERT

When you are hiking, camping, or having a picnic in the desert, you might see tortoises. The list of DO'S and DON'TS will help increase enjoyment of the desert and at the same time protect the tortoise.

DO'S

- Enjoy the tortoise at a distance with binoculars, respecting that it is a wild animal. By keeping a distance, you will reduce stress to the tortoise. When a tortoise is frightened by an approaching person, it may release the contents of its bladder. Tortoises store water in the bladder and can reabsorb it during dry seasons. The loss of water can place the tortoise under unnecessary stress or contribute to early death.
- If you remain still and quiet, the tortoise may approach you and rest in your shade.
- Check under your car before driving away. Often a tortoise will seek the shade of a car and be next to the wheels.
- During summer and fall thunder showers, drive slowly on desert roads, especially the dirt and paved roads with little traffic. During rain storms, tortoises can be quite active and come to roads to drink the pooled water.

DON'TS

- Please do not handle the tortoises. State and Federal laws prohibit touching, handling or any type of harassment. Handling may also harm the tortoises because they may release the contents of their bladders.
- Do not move close to photograph it with your camera, but instead use a telephoto lens.
- Do not try to "pose" a tortoise for a picture. If you approach too closely, you might frighten or stress the tortoise.
- Do not pull tortoises out of burrows or cover sites.

CHAPTER 5

MANAGEMENT OF CAPTIVE TORTOISES:

LOST TORTOISES, ADOPTIONS, HUSBANDRY, AND HEALTH

CAPTIVE TORTOISES MAY BE POSSESSED LEGALLY

Please see Chapter 2 for details about laws regarding possession of captive tortoises, registration with the State through an Adoption Program, and transfer of tortoises from one owner or household to another.

CAPTIVE TORTOISES MUST NOT BE RELEASED TO THE WILD

Frequently, people who possess captive tortoises contact government agencies and ask where they can release their pet. Please tell them that there are several reasons why domesticated or pet tortoises should not be returned to the desert:

- *First*, release of captive tortoises is a violation of the Federal Endangered Species Act under the section on "take," which includes capturing, pursuing, shooting, harming and harassing. Released pets are likely to have harmful effects on the wild populations. Pet tortoises often carry diseases and parasites which may not be apparent with casual inspections. These diseases can and already have infected wild populations. A prime example is the appearance of the highly contagious and usually fatal upper respiratory tract disease at the Desert Tortoise Natural Area and elsewhere in the Mojave Desert in the late 1980's. This disease, which is caused by a very small bacteria called a *Mycoplasma*, is killing thousands of wild tortoises. Experts think that *Mycoplasma* may have been transmitted to wild populations by unauthorized releases of ill captive tortoises.
- *Second*, recent research indicates that several genetically distinct tortoise populations exist. A tortoise from one genetically distinct unit should not be mixed with tortoise populations from another unit. Often the pet owner does not know the source of the captive tortoise.
- *Third*, studies indicate that domesticated tortoises do not have a high survival rate, probably because they have forgotten the intricate details of

living in the harsh desert environment. Pets do not dig burrows as readily or as well as wild tortoises. Pets also may not remember how to forage.

- *Fourth*, release of captive tortoises increases competition and stress for the existing wild tortoise populations. Many wild tortoise populations are already threatened with loss and deterioration of habitat. The amount of undisturbed desert decreases yearly, usurped by construction, development, and other human pressures. The quality of remaining habitat is also decreasing because of the many demands for land use: mining, grazing, off-road vehicle recreation, and energy development. Desert habitat recovers very slowly from disturbance. As a result, tortoise habitats can support progressively fewer individuals.
- *Fifth*, released pets can harm wild tortoises by interfering with the social structure. Wild tortoises have well-defined activity areas and often defend territories and burrows. The introduction of new tortoises to an area can stimulate fights for burrows, food, and other resources.

WHAT TO DO IF YOU FIND A TORTOISE IN A NON-DESERT CITY OR TOWN

Most tortoises found in towns and cities away from the desert have been captives for many years, often decades. Over 60,000 captive tortoises live in residential areas in California such as the greater Los Angeles area, the vicinity of San Diego, the Central Valley, etc. Sometimes such captives have escaped from owners who have had them for 20 years or more. Sometimes they have been "owned" by many people. If the tortoise has a hole drilled in the shell or numbers or colors painted on it, it probably has been a captive for some time. If it has an official Department of Fish and Game sticker with a registration number, Fish and Game officials can locate the owners through the registration system. Even if there are no obvious signs of captivity, you must assume that the tortoise is an escaped captive.

Tortoises that have escaped their owners and are wandering the streets of a city or town are likely to be crushed by vehicles or killed by dogs. Please pick up the tortoise and call the nearest California Turtle and Tortoise Club Adoption Chairman (see following page). If the tortoise possesses an official registration number, the Adoption Chairman can determine the owner. If the tortoise has no sticker and the owner cannot be located, the tortoise will be taken by a representative of the California Turtle and Tortoise Club. A new home will be found for the tortoise and it will be officially registered with the State. See the next section, **Adopting a Captive Tortoise for a Pet**, for information on the people in charge of Adoptions.

ADOPTING A CAPTIVE TORTOISE FOR A PET

In 1974 the California Department of Fish and Game established cooperative programs with several organizations to facilitate the handling of captive tortoises that people no longer want. The program includes the California Turtle and Tortoise Club, Tortoise Education Adoption Media, and several individuals. At no cost to the Department, members of these organizations provide temporary homes for the tortoises before finding suitable people to "adopt" them. They also provide quarterly reports of their adoption activities to the Department. These private organizations have been instrumental in developing methods for breeding and rearing captive tortoises. They are experts in tortoise husbandry. They maintain lists of individuals who want to adopt desert tortoises and can provide a safe home.

When you provide names of people in charge of local Adoption Programs to the public, select a person near to the person making the request. Be certain to provide more than one name in case the Adoption Chairperson is not available, has changed phone numbers, or has moved. If no Adoption Chairperson is listed, give the name of an officer.

Westchester Chapter P.O. Box 90252 Los Angeles, CA 90009	President: Cathy Berrett (310) 649-0578 V. President: Andy Olszewski (310) 827-1485 Adoptions: Cathy Berrett (310) 649-0578
Foothill Chapter P.O. Box 51002 Pasadena, CA 91115-1002	President: Mike Connor (818) 345-0425 V. President: Sally Juncal (213) 483-3167 Adoptions: Lou Hernandez (818) 793-1609
Orange County Chapter P.O. Box 11124 Santa Ana, CA 92711	President: Shellie Fried (714) 870-9696 V. President: Mike Kingsbury (714) 893-4253 Adoptions: Brenda Hopkins (310) 693-6507
Inland Empire Chapter P.O. Box 2371 San Bernardino, CA 92406	President: Dee Dillon (909) 822-1155 V. President: Madeline Dexter (909) 885-5187 Adoptions: Bunny Williams (909) 862-4777
Valley Chapter P.O. Box 44152 Panorama City, CA 91402	President: Robert Kinder (818) 344-5607 V. President: Mary Cohen (310) 455-3242 Adoptions: Diane Levine (818) 899-7223
Low Desert Chapter P.O. Box 4156 Palm Desert, CA 92261	President: Linda York (619) 347-2647 V. President: E. Cockcroft (619) 321-6434 Adoptions: Linda York (619) 347-2647

High Desert Chapter P.O. Box 163 Victorville, CA 92392	President: Gary Dibben Secretary: Sharon Dibben Adoptions: Martin Rose	(619) 949-8670 (619) 949-8670 (619) 243-7687
Santa Barbara Branch P.O. Box 60745 Santa Barbara, CA 93160	President: Joan Terrio V. President: Maree Friend	(805) 569-5096 (805) 647-6481
TOOSLO (San Luis Obispo) Branch P.O. Box 14222 San Luis Obispo, CA 93406	President: Bob Thomas V. President: Steve Bonham Adoptions: see Bob Thomas above	(805) 995-1256 (805) 995-3875
Turtle & Tortoise Care Soc. Chapter P.O. Box 1443 Cypress, CA 90630	President: Sandy Veverka V. President: Helen Cain	(310) 926-1250 (310) 425-7387
Northern California Branch (Bay Area Turtle and Tortoise Society) 20038 Butterfield Drive Castro Valley, CA 94546	President: Gary Wilfong Adoptions: Ginger Wilfong	(510) 886-2946 (510) 886-2946
Central California	Pamela Lara	(209) 659-1197

TORTOISE HUSBANDRY

You should direct people who ask for information about tortoise husbandry to contact the nearest chapter of the California Turtle and Tortoise Club. Members have expertise on such subjects as backyard plants that are poisonous to tortoises; plants, grasses, and vegetables appropriate for feeding the captives; and information on how to care for the captive during hibernation.

THE ILL OR INJURED CAPTIVE TORTOISE

If you receive calls or questions about ill or injured captive tortoises, or ill or injured tortoises found in cities, you should refer the person to a veterinarian (see Appendix 2). Very few veterinarians are interested in or have expertise in treating tortoises. Tortoises are difficult to coax from their shells and often present very little evidence of disease or injury unless in serious condition, so treatment can be difficult and expensive.

CHAPTER 6

GOVERNMENT AGENCIES WITH RESPONSIBILITIES FOR PROTECTING AND MANAGING DESERT TORTOISES

In California, three government agencies have the primary responsibilities for protecting and managing desert tortoise populations and their habitats: the California Department of Fish and Game, the Bureau of Land Management, and the Fish and Wildlife Service. There are several other agencies, including the Department of Defense and California Energy Commission, but their roles are not as extensive. The following information is a very brief outline of the major functions of the three agencies.

CALIFORNIA DEPARTMENT OF FISH AND GAME

The Department of Fish and Game (CDFG) has a long history of protecting desert tortoises. State laws have prohibited the purchase or sale of the species since 1939; shooting or harming tortoises has been against the law since 1961. In the last few years, wardens have successfully prosecuted cases involving illegal take, possession and transport of tortoises under the California Endangered Species Act and Fish and Game Codes (see page 7 in Chapter for information on law enforcement). Special legislation allows possession of captive tortoises by permit under certain circumstances (Appendix 1). The CDFG implements the permit process for captive tortoises and oversees the Adoption Program with the California Turtle and Tortoise Club (see Chapter 7).

The CDFG provides funding for studies and research on the tortoise through the Endangered Species Tax Check-off Program and other special funding sources. For example, during the last few years CDFG transferred funds to experts in the Bureau of Land Management for research on upper respiratory tract disease, raven predation, growth rates in tortoise populations, and differences in shell shape between populations. Working with The Nature Conservancy and the Desert Tortoise Preserve Committee, the CDFG recently acquired substantial acreage within the Desert Tortoise Research Natural Area. The agency also established the West Mojave Ecological Reserve and Fremont Valley Ecological Reserve outside the Desert Tortoise Research Natural Area.

Under provisions in the California Environmental Quality Act and the Fish and Game Code, the CDFG can issue management agreements for development or construction in tortoise habitat. The effects of the developments on tortoises are often offset through land acquisition, construction of protective fences, and other actions that minimize or eliminate threats to tortoises and their habitats. The CDFG works closely with federal, county, and other state agencies to conserve, protect, and help recover desert tortoise populations. Individuals and companies wishing to undertake development or construction projects on public or private lands with tortoise habitat should contact CDFG at (909) 597-8235.

BUREAU OF LAND MANAGEMENT

The Bureau of Land Management (BLM) manages several million acres of public lands with desert tortoise habitat in the California deserts. Since the 1970's BLM experts on the desert tortoise have held a leadership role in designing and carrying out studies, research and monitoring of the species. At the Desert District Office in Riverside, the BLM has three scientists who conduct studies and research on many aspects of tortoise biology and management. Research is underway on such topics as population trends, mortality rates, disease, nutritional requirements, health profiles, and predation. Many studies and research projects are jointly funded by the California Department of Fish and Game, the California Energy Commission, and the California Department of Parks and Recreation. Private corporations such as Southern California Edison Company are actively involved too. The information generated by the scientists is presented at the Desert Tortoise Council's annual symposium and at national scientific meetings. The data also are used to develop education programs and land-use plans for managing parts of the desert.

In 1973 the BLM initiated a long-term process to establish and protect tortoise populations in the western Mojave Desert at the Desert Tortoise Research Natural Area. The 38-square mile preserve was formally designated in 1980. In 1980 the BLM also designated the Chuckwalla Bench Area of Critical Environmental Concern in the southeastern Colorado Desert, another area with a nationally significant tortoise population. In cooperation with the Desert Tortoise Preserve Committee, The Nature Conservancy, and other groups, the BLM has established a very successful land acquisition program for both areas. Law enforcement officers--called Rangers--contribute to protection of the tortoises and their habitats at the two protected areas, as well as throughout the California deserts.

The BLM manages public lands for many different resources and uses other than wildlife, such as mineral exploration and development, production of energy, recreation, and livestock grazing. To reduce impacts to the tortoises and their habitats, BLM closely

reviews proposed activities for the public lands. In some cases, special actions to protect the species and its habitat are required. The BLM is in the process of developing management plans for the major tortoise habitats within the state. Individuals and companies wishing additional information on planning activities on BLM-administered lands should contact BLM at (909) 697-5200.

FISH AND WILDLIFE SERVICE

Compared with the California Department of Fish and Game, the Fish and Wildlife Service (FWS) is a relative newcomer to protection and management of wild desert tortoises in California. The FWS has the responsibility for directing the recovery of the tortoise and other threatened and endangered species through the Endangered Species Act of 1973 (as amended). Soon after the Federal listing of the tortoise as threatened species in 1990, the FWS established a Recovery Team of experts in conservation biology, behavior, genetics, biogeography, disease, ecology, and physiology. The Recovery Team and FWS are developing a Recovery Plan for the species. The FWS supports research on threatened and endangered species, often through transfer of funds to the California Department of Fish and Game, and can also acquire habitat. Through the law enforcement branch, the FWS enforces the Endangered Species Act.

The FWS works with individuals and businesses that propose actions with potential to affect tortoises and their habitats. A company can prepare a special plan, called a Habitat Conservation Plan, that minimizes impacts to tortoises and their habitats. The FWS requires that Habitat Conservation Plans provide an overall benefit to the recovery of the tortoise. Such plans can involve habitat acquisition, protective fencing, research, and education programs. The FWS oversees a similar evaluation process for government-proposed activities that may affect tortoises and their habitats. For additional information, call (805) 644-1766 for Kern, San Bernardino, Los Angeles, and Inyo counties; or (619) 431-9440 for Riverside, Imperial, and San Diego counties.

CHAPTER 7

ORGANIZATIONS WITH EXPERTISE ON DESERT TORTOISES

Many telephone callers request additional information about desert tortoises or ask what they can do to help the tortoise. You can tell them about the different organizations described below and then, depending on their interests, direct them to one or more nonprofit corporations or groups which sponsor programs on education, husbandry, adoption, land acquisition, conservation, and science. In some cases, the organization may have a local branch or chapter. Your efforts to assist the callers will have many long-term benefits for protecting tortoises because people with knowledge are a very valuable asset in recovering a threatened species.

In California and adjacent Nevada there are four major corporations:

- the CALIFORNIA TURTLE AND TORTOISE CLUB, which has eleven chapters and branches throughout the State, is recognized for its State-approved Adoption Program and expertise on husbandry;
- the DESERT TORTOISE PRESERVE COMMITTEE, which acquires habitat and has numerous education and land stewardship programs;
- the DESERT TORTOISE COUNCIL, a four-state organization which holds workshops and annual symposia where experts present the latest information on scientific research, habitat management, and conservation; and
- TORTOISE GROUP, a Nevada-based organization emphasizing protection of free-living desert tortoises and their natural habitat, as well as responsible care of legally-held captive tortoises.

Other organizations of interest are TEAM (Tortoise Education and Adoption Media), the SACRAMENTO TURTLE AND TORTOISE CLUB (which is affiliated with TEAM), and the SAN DIEGO TURTLE AND TORTOISE SOCIETY. Information on each organization is provided below.

MAJOR NONPROFIT CONSERVATION AND EDUCATION ORGANIZATIONS

CALIFORNIA TURTLE AND TORTOISE CLUB (CLUB or CTTC). Founded in 1964, the CTTC has over 3,000 members and 11 chapters and branches. New chapters are being formed almost yearly. The Club was organized to preserve, conserve, study, and disseminate knowledge about turtles and tortoises. Chapters and branches hold monthly meetings at which local and international experts speak on a variety of subjects. The Club also has sponsored symposia and programs of national and international significance. The various chapters and branches raise funds for educational programs, as well as local and world-wide conservation projects for turtles and tortoises. The Club is most widely recognized for its State-sanctioned ADOPTION PROGRAM for captive desert tortoises. The ADOPTION PROGRAM is managed through a network of volunteers. Because of its efforts to protect the desert tortoise, the Club received an award from the Secretary of Interior. The Club produces a monthly newsletter, the *Tortuga Gazette*. The following information on each chapter and branch provides times and locations of meetings, names of some of the 1992 officers, and the permanent addresses.

Executive Board for CTTC
P.O. Box 7300
Van Nuys, CA 91409-7300

Chairman: Marc D. Graff, MD (818) 993-1551
V-Chair: Jayne Chavez-Scales (909) 798-6725
Secretary: Dee Dillon (714) 822-1155
Treasurer: Robert Kinder (818) 344-5607

Westchester Chapter
P.O. Box 90252
Los Angeles, CA 90009

President: Cathy Berrett (310) 649-0578
V. President: Andy Olszewski (310) 827-1485
Adoptions: Cathy Berrett (310) 649-0578

Meets: 2nd Friday, 7:30 pm at Veterans Memorial Bldg., Kaizuka Rm, 4117 Overland, Culver City

Foothill Chapter
P.O. Box 51002
Pasadena, CA 91115-1002

President: Mike Connor (818) 345-0425
V. President: Sally Juncal (213) 483-3167
Adoptions: Lou Hernandez (818) 793-1609

Meets: 4th Friday, 7:30 pm at Los Angeles Arboretum, 301 N. Baldwin Avenue, Arcadia

Orange County Chapter

P.O. Box 11124

Santa Ana, CA 92711

President: Shellie Fried (714) 870-9696

V. President: Mike Kingsbury (714) 893-4253

Adoptions: Brenda Hopkins (310) 693-6507

Meets: 2nd Friday, 7:30 pm at Chapman University, Science Center Rm 131, 346 Center St., Orange

Inland Empire Chapter

P.O. Box 2371

San Bernardino, CA 92406

President: Dee Dillon (714) 822-1155

V. President: Madeline Dexter (714) 885-5187

Adoptions: Bunny Williams (714) 862-4777

Meets: 1st Friday, 7:30 pm at San Bernardino County Museum, 2024 Orange Tree Lane, Redlands

Valley Chapter

P.O. Box 44152

Panorama City, CA 91402

President: Robert Kinder (818) 344-5607

V. President: Mary Cohen (310) 455-3242

Adoptions: Diane Levine (818) 899-7223

Meets: 3rd Friday, 7:30 pm at Fallbrook Mall, 6507 Fallbrook, Canoga Park

Low Desert Chapter

P.O. Box 4156

Palm Desert, CA 92261

President: Linda York (619) 347-2647

V. President: E. Cockcroft (619) 321-6434

Adoptions: Linda York (619) 347-2647

Meets: 1st Monday, 7:00 pm at The Living Desert Reserve, 47-900 Portola, Palm Desert

High Desert Chapter

P.O. Box 163

Victorville, CA 92392

President: Gary Dibben (619) 949-8670

Secretary: Sharon Dibben (619) 949-8670

Adoptions: Martin Rose (619) 243-7687

Meets: 2nd Monday, 7:00 pm at Victor Valley Museum, Apple Valley Road, Apple Valley

Santa Barbara Branch

P.O. Box 60745

Santa Barbara, CA 93160

President: Joan Terrio (805) 569-5096

V. President: Maree Friend (805) 647-6481

Meets: 3rd Thursday, 7:30 pm at the Humane Society, 5399 Overpass Road, Santa Barbara

TOOSLO (San Luis Obispo) Branch
P.O. Box 14222
San Luis Obispo, CA 93406

President: Bob Thomas (805) 995-1256
V. President: Steve Bonham (805) 995-3875
Adoptions: see Bob Thomas above

Meets: 2nd Wednesday, 7:00 pm at Mid-State Bank, 75 Santa Rosa Street, San Luis Obispo

Turtle & Tortoise Care Soc. Chapter
P.O. Box 1443
Cypress, CA 90630

President: Sandy Veverka (310) 926-1250
V. President: Helen Cain (310) 425-7387

Meets: 3rd Friday, 7:00 pm at Central Park Recreation Center, 7821 Walker St., La Palma

Northern California Branch
(Bay Area Turtle and Tortoise Society)
20038 Butterfield Drive
Castro Valley, CA 94546

President: Gary Wilfong (510) 886-2946
Adoptions: Ginger Wilfong (510) 886-2946

DESERT TORTOISE PRESERVE COMMITTEE (COMMITTEE). The Committee was founded in 1974 to promote the welfare of the desert tortoise in the southwestern United States and to establish a preserve or Natural Area on the slopes of the western Rand Mountains and adjacent Fremont Valley (eastern Kern County) where the density of tortoises was the highest ever recorded. The Committee has been remarkably successful in raising funds to acquire habitat, buy fencing, establish visitor facilities, and provide support for naturalists and critical monitoring projects at the Desert Tortoise Research Natural Area in the western Mojave Desert. To achieve its goals, members work closely with the California Department of Fish and Game, the Bureau of Land Management, The Nature Conservancy, some major corporations and developers, the California Turtle and Tortoise Club, and many other groups. A long-term program for land acquisition has been established and thousands of acres of habitat have been acquired. Programs for stewardship, education, and monitoring have functioned productively for several years. In 1991 the Committee expanded its land acquisition and stewardship efforts to other parts of the California deserts. Members and volunteers lead tours, develop brochures, maintain nature trails and fencing, and give slide programs to thousands of people annually. A newsletter, *Tortoise Tracks* is published quarterly, and the corporation holds annual meetings in January.

The Committee and members of its Board of Trustees have been the recipients of numerous local and national awards. For example, Congress identified the Committee

as a local, grass-roots organization dedicated to preserving biodiversity. For information, write to:

Desert Tortoise Preserve Committee, Inc.
P.O. Box 2910
San Bernardino, California 92406

Or you may call:

Phyllis Schmidt at (800) 525-2443 during business hours. An alternate person is Roger Dale, President, at (909) 883-7970.

DESERT TORTOISE COUNCIL (COUNCIL). The Council was founded in 1975 to assure the continued survival of viable populations of the desert tortoise throughout its existing range in California, Arizona, Nevada, and Utah. Membership is composed of wildlife biologists and managers from Federal and state agencies, research scientists, students, conservationists, experts in husbandry, and the general public. The Council has hosted an annual meeting and symposium since 1976 and also publishes and disseminates proceedings of the symposia. The annual symposium has grown in length and scope over the last seventeen years, and now about 300 people attend to hear over 50 papers, special sessions, and panel discussions on the latest research data and management techniques on such subjects as disease, health, behavior, ecology, general physiology, and management. In recent years the Council has also held workshops to train biologists and managers about governmental requirements to protect habitat and animals and for surveying tortoise populations and habitat.

The Council serves in a professional advisory manner on matters involving management, conservation, and protection of tortoises. Members often serve on government-sponsored committees and review teams to help resolve problems. The Council also supports programs that ensure the continued survival of wild tortoises. To commend outstanding action and dedication by individuals and organizations fostering objectives of the Council, awards are presented at the annual symposium.

For information about joining the Council or attending workshops and symposia, call or write:

Dr. Allan Muth, Senior Co-Chairman
P.O. Box 1738
Palm Desert, CA 92261-1738
(619) 341-8449

TORTOISE GROUP (GROUP). This Nevada-based organization achieved non-profit status in 1982 and focuses its efforts on two major topics: (1) protection of free-living desert tortoises and their habitats, and (2) responsible care of legally held captive tortoises. The Group supports the formation of preserves or natural areas to assure that viable populations of tortoises and other game and non-game animals can exist into perpetuity. Members attend public meetings and serve on government committees established by the Bureau of Land Management, the Nevada Department of Wildlife, and Clark County. The Group has developed and participates in numerous programs to assure responsible care of legally-held captive tortoises. The Group assists with the establishment of regulations that allow possession of domesticated tortoises and their offspring. At the same time, members discourage unauthorized collection or disturbance of wild tortoises and release of pets or their young into the desert. Rescue and adoption services are provided for unwanted or displaced captives.

The many information and educational programs assist in promoting responsible attitudes and public action. For example, information sheets on care of captive tortoises are available:

- # 1 Avoiding Crowding and Planning for Compatibility Among Your Tortoises
- # 2 Determining the Age and Sex of Your Desert Tortoise
- # 3 Measuring Tortoise Size and Transporting Tortoises
- # 4 Comparison of Nutrient Value in Food
- # 5 Marking Your Tortoise
- # 6 The North American Box Turtle--How to Care for it in the Las Vegas Area
- # 7 Recipe for Salad
- # 8 Alternative Design for Underground Tortoise Burrow
- # 9 Above-Ground Burrow for One Adult Tortoise
- # 10 Above Ground Burrow for Two Adult Tortoises
- # 11 Keeping Records of Tortoise Activities and Growth

For information on membership and other topics, call or write to:

Tortoise Group
5157 Poncho Circle
Las Vegas, NV 89119
(702) 739-8043

OTHER ORGANIZATIONS

The Living Desert

Curator of Animals: Terrie Correll
47900 Portola Avenue
Palm Desert, California 92260
(619) 346-5694

RENO TUR-TOISE CLUB

ATTN: Darlene Pond
7590 Tamra Drive
Reno, NV 89506
(702) 972-7712

Sacramento Turtle and Tortoise Club

President: Felice Rood
25 Starlit Circle
Sacramento, CA 95831
(916) 421-1134

San Diego Turtle and Tortoise Society

13963 Lyons Valley Road
Jamul, CA 91935-9607

TEAM, ATTN: Roy Lewis

3245 Military Avenue
Los Angeles, CA 90034

APPENDIX 1. EXCERPTS FROM FEDERAL AND STATE LAWS

The following material is provided for the convenience of law enforcement officers.

FEDERAL LAWS - from the Endangered Species Act of 1973, as amended through the 100th Congress (1988):

PENALTIES AND ENFORCEMENT

Sec. 11. (a) Civil Penalties.—(1) Any person who knowingly violates, and any person engaged in business as an importer or exporter of fish, wildlife, or plants who violates, any provision of this Act, or any provision of any permit or certificate issued hereunder, or of any regulation issued in order to implement subsection (a)(1)(A), (B), (C), (D), (E), or (F), (a)(2)(A), (B), (C), or (D), (c), (d) (other than regulation relating to recordkeeping or filing of reports), (f), or (g) of section 9 of this Act, may be assessed a civil penalty by the Secretary of not more than \$25,000 for each violation. Any person who knowingly violates, and any person engaged in business as an importer or exporter of fish, wildlife, or plants who violates, any provision of any other regulation issued under this Act may be assessed a civil penalty by the Secretary of not more than \$12,000 for each such violation. Any person who otherwise violates any provision of this Act, or any regulation, permit, or certificate issued hereunder, may be assessed a civil penalty by the Secretary of not more than \$500 for each such violation. No penalty may be assessed under this subsection unless such person is given notice and opportunity for a hearing with respect to such violation. Each violation shall be a separate offense. Any such civil penalty may be remitted or mitigated by the Secretary. Upon any failure to pay a penalty assessed under this subsection, the Secretary may request the Attorney General to institute a civil action in a district court of the United States for any district in which such person is found, resides, or transacts business to collect the penalty and such court shall have jurisdiction to hear and decide any such action. The court shall hear such action on the record made before the Secretary and shall sustain his action if it is supported by substantial evidence on the record considered as a whole.

(2) Hearings held during proceedings for the assessment of civil penalties by paragraph (1) of this subsection shall be conducted in accordance with section 554 of title 5, United States Code. The Secretary may issue subpoenas for the attendance and testimony of witnesses and the production of relevant papers, books, and documents, and administer oaths. Witnesses summoned shall be paid the same fees and mileage that are paid to witnesses in the courts of the United States. In case of contumacy or refusal to obey a subpoena served upon any person pursuant to this paragraph, the district court of the United States for any district in which such person is found or resides or transacts business, upon application by the United States and after notice to such person, shall have jurisdiction to issue an order requiring such person to appear and give testimony before the Secretary or to appear and produce documents before the Secretary, or both, and any failure to obey such order of the court may be punished by such court as a contempt thereof.

(3) Notwithstanding any other provision of the Act, no civil penalty shall be imposed if it can be shown by a preponderance of the evidence that the defendant committed an act based on a good faith belief that he was acting to protect himself or herself, a member of his or her family, or any other individual from bodily harm, from any endangered or threatened species.

(b) CRIMINAL VIOLATIONS.—(1) Any person who knowingly violates any provision of this Act, of any permit or certificate issued hereunder, or of any regulation issued in order to implement subsection (a)(1)(A), (B), (C), (D), (E), or (F); (a)(2)(A), (B), (C), or (D), (c), (d) (other than a regulation relating to recordkeeping, or filing of reports), (f), or (g) of section 9 of this Act shall, upon conviction, be fined not more than \$50,000 or imprisoned for not more than one year, or both. Any person who knowingly violates any provision of any other regulation issued under this Act shall, upon conviction, be fined not more than \$25,000 or imprisoned for not more than six months, or both.

(2) The head of any Federal agency which has issued a lease, license, permit, or other agreement authorizing a person to import or export fish, wildlife, or plants, or to operate a quarantine station for imported wildlife, or authorizing the use of Federal lands, including grazing of domestic livestock, to any person who is convicted of a criminal violation of this Act or any regulation, permit, or certificate issued hereunder may immediately modify, suspend, or revoke each lease, license, permit, or other agreement. The Secretary shall also suspend for a period of up to one year, or cancel any Federal hunting or fishing permits or stamps issued to any person who is convicted of a criminal violation of any provision of this Act or any regulation, permit, or certificate issued hereunder. The United States shall not be liable for the payments of any compensation, reimbursement, or damages in connection with the modification, suspension, or revocation of any leases, licenses, permits stamps, or other agreements pursuant to this section.

STATE LAWS - Fish and Game Code for California (from J., B., and L. Gould 1991)

2080. Prohibiting the import or export of endangered species. No person shall import into this state, export out of this state, or take, possess, purchase, or sell within this state, any species, or any part or product thereof, that the commission determines to be an endangered species or a threatened species, or attempt any of those acts, except as otherwise provided in this chapter, the Native Plant Protection Act (Chapter 10 (commencing with section 1900) of this code), or in the California Desert Native Plants Act Division 23 (commencing with Section 70500) of the Food and Agricultural Code).

12008. Violation of provisions relating to endangered species.

Except as otherwise provided in Section 597 of the Penal Code, the punishment for a violation of any of the following provisions is a fine of not more than five thousand dollars (\$5,000) or imprisonment in the county jail for not more than one year, or both the fine and imprisonment.

(a) Chapter 1.5 (commencing with Section 2050) of Division 3. [California Endangered Species Act]

STATE LAWS - CALIFORNIA ADMINISTRATIVE CODE, TITLE 14.

674. Permits to Possess Desert Tortoises (*Gopherus*).

(a) Desert tortoises may be possessed only under the authority of a permit issued by the department. The department may issue a permit for the possession of a desert tortoise provided the tortoise was legally acquired and possessed prior to March 7, 1973. The department may require an applicant for a permit to submit proof of the legal acquisition of any desert tortoise.

(b) Applications for a tortoise permit shall be submitted on forms furnished by the department and may be filed with the department at any time. Upon approval of the application, the department shall provide a tag which shall be affixed to the desert tortoise as directed by the department.

(c) No desert tortoise may be transferred to any other person without prior department approval.

(d) Possession of a desert tortoise, regardless of subspecies, except under the authority of a department permit is in violation of this section. Untagged desert tortoises shall be seized by the department.

NOTE: Authority cited: Sections 200, 202, 1002 and 5002, Fish and Game Code. Reference: Sections 200-202, 203.1, 5000-5002, 5060 and 5061, Fish and Game Code.

APPENDIX 2. LIST OF VETERINARIANS

The following veterinarians have been recommended by members of the California Turtle and Tortoise Club or have requested that we place them on the list. However, individuals wishing to have their captive tortoises examined or treated by a veterinarian should make their own inquiries as to the qualifications and experience of the veterinarians, their procedures for treatment, and prices. Names of veterinarians are arranged by area code.

Central Valley and Coastal California: 209 and 805 Area Codes

Richard Svihla, DVM
Lacy Animal Hospital
20665 Fargo Avenue
Lemore, CA 93245
(209) 924-7532

Stephen Beck, DVM
Grand Avenue Veterinary Hospital
600 Grand Avenue
Grover City, CA 93433
(805) 481-2595

Lowell Novy, DVM
Valley Veterinary Clinic
845 Los Angeles Avenue
Simi Valley, CA 93065
(805) 526-0917

James Gray, DVM
Ventura Veterinary Hospital
1784 Thompson Blvd.
Ventura, CA 93001
(805) 648-2797

Marti Rae Armington, DVM
Port Hueneme Animal Hospital
701 E. Port Hueneme Road
Port Hueneme, CA 93041
(805) 488-4514

Robert Clipsham, DVM
California Exotics Clinic
5734 E. Los Angeles Avenue
Simi Valley, CA 93063
(805) 522-7543, (818) 346-6234

Christine McFadden, DVM
Valley Animal Hospital
373 S. Highway 59
Merced, CA 95340
(209) 384-7387

Sherry Clark, DVM
Southwest Veterinary Hospital
2905 Brundage Lane
Bakersfield, CA 93309
(805) 327-5719

Greg Haskell, DVM
St. Francis Pet Clinic
138 W. Ortega Street
Santa Barbara, CA 93101
(805) 963-0577

Robert Mushkot, DVM
Adobe Animal Hospital
17787 Sierra Highway
Canyon Country, CA 91351
(805) 251-3710

Robert E. Kind, DVM
Conejo Valley Veterinary Clinic
1850 E. Thousand Oaks Blvd.
Thousand Oaks, CA 91362
(805) 495-4671

Michael Gerardo, DVM
Rancho Sequoia Veterinary Hospital
3380 Los Angeles Avenue
Simi Valley, CA 93065
(805) 522-7476

Michael D. Rittenberg, DVM
Cottage Animal Hospital
906 E. 5th Street
Oxnard, CA 93030
(805) 487-3985

Western and Northern Mojave Desert: 619 and 805 Area Codes

Alson Sears, DVM
Sears' Veterinary Hospital
565 West Avenue I
Lancaster, CA 93534
(805) 948-5911

J. McClaine, DVM
Desert Care Animal Hospital
15664 Main Street, Suite 130
Hesperia, CA 92345
(619) 949-7387

C. Lind, DVM; T. Talbot, DVM
C. London, DVM
Bishop Veterinary Hospital
1650 N. Sierra Highway
Bishop, CA 93514
(619) 873-5801

Jeff Novak, DVM
Crestwood Animal Hospital
1131 Inyokern Road
Ridgecrest, CA 93555
(619) 446-7616

Southern California: 818 Area Code

Ted Adler, DVM; Dan Reimer, DVM
Adler Veterinary Group
16911 Roscoe Blvd.
Sepulveda, CA 91343
(818) 893-6366

Michael Brown, DVM
Norada Animal Clinic
8918 Reseda Blvd.
Northridge, CA 91324
(818) 886-1216

Gaylon TeSlaa, DVM
Woodcliff Animal Hospital
10115 Canoga Avenue
Chatsworth, CA 91311
(818) 998-2998

R. A. Kray, DVM
Kray Veterinary Clinic
1140 N. Pacific Avenue
Glendale, CA 91202
(818) 502-1134

Michael Gary, DVM
Cypress Avenue Animal Hospital
1400 Cypress Avenue
Covina, CA 91724
(818) 331-0775

Steve Haerther, DVM
Cosycroft Pet Hospital
20601 Plummer
Chatsworth, CA 91311
(818) 341-3040

Ronald H. Corbett, DVM
Alosta Animal Hospital
1821 E. Alosta Avenue
Glendora, CA 91740
(818) 963-1674

Michael Krivoy, DVM
Bereley Pet Hospital
10908 Burbank Blvd.
North Hollywood, CA 91601
(818) 763-6221

F. A. Lasdon, DVM
West Valley Pet Clinic
22430 Ventura Blvd.
Woodland Hills, CA 91364
(818) 225-7160

Reid Rimensberger, DVM
Warner Pet Clinic
20930 Victory Blvd.
Woodland Hills, CA 91367
(818) 710-8528

Angela Courtney, DVM
Rainbow Veterinary Hospital
2321 Empire Avenue
Burbank, CA 91504
(818) 846-1166

Amy Worell, DVM
Parkwood Pet Clinic
6330 Fallbrook Avenue
Woodland Hills, CA 91364
(818) 884-5506

J. Isaacs, DVM; K. Landerman DVM
Encino Veterinary Clinic
17009 Ventura Blvd.
Encino, CA 91316
(818) 783-7387

David Gantenbein, DVM
Woodland Hills
House Calls
(818) 347-2365

Dennis Morley, DVM
Morley Animal Hospital
7125 Darby Avenue
Reseda, CA 91335
(818) 343-1915

B. Dawson, DVM; L. Pickell, DVM
Teresita Animal Hospital
2695 E. Foothill Blvd.
Pasadena, CA 91107
(818) 792-5143

Richard Willis, DVM
Pasadena Pet Hospital
25 N. Fulton
Pasadena, CA 91107
(818) 795-4353

Dayle Tamura, DVM
H. D. Henstra, DVM
Alhambra Veterinary Hospital
1501 W. Mission Road
Alhambra, CA 91803
(818) 289-9227

Chris Cauble, DVM
Glen Howard, DVM
Mobile Vet
House calls in the Los Angeles area
(818) 242-5576

Southern California and Los Angeles Area: 213 Area Code

Patty Boge, DVM
Narbonne Animal Clinic
25445 Narbonne Avenue
Lomita, CA 90717
(213) 325-5850

Southern California and Greater Los Angeles Area: 310 Area Code

J. J. Bernstein, DVM
Ber-Mar Pet Hospital
349 E. Florence Avenue
Inglewood, CA 90301
(310) 677-9187

Michael Oshry, DVM
R.K. Rowley, DVM
815 W. Manchester
Inglewood, CA 90301
(310) 649-6211

Bruce Smith, DVM
Harbor Animal Hospital
2078 Torrance Blvd.
Torrance, CA 90501
(310) 328-3733

Thad Thorson, DVM
Long Beach Dog & Cat Hospital
3816 E. Anaheim Street
Long Beach, CA 90804
(310) 434-9966

Norman Weiner, DVM
Bel-Air Animal Hospital
2340 S. Sepulveda
West Los Angeles, CA 90064
(310) 479-4419

J. L. Berens, DVM
Animal & Avian Clinic of Golden Cove
31236 Palos Verdes Drive West
Rancho Palos Verdes, CA 90274
(310) 377-7804

Frank Lavac, DVM; Cassie Jones, DVM
Wilshire Animal Hospital
2421 Wilshire Blvd.
Santa Monica, CA 90403
(310) 828-4587

Richard Pol, DVM
San Vicente Animal Clinic
1716 San Vicente Blvd.
Los Angeles, CA 90049
(310) 820-3719

Carl Palazzolo, MBA DVM
Doug Mader, MS, DVM
Long Beach Animal Hospital
3816 E. Anaheim Street
Long Beach, CA 90804
(310) 434-9966

Camillo Rocha, DVM
Firestone Veterinary Hospital
7150 Firestone Blvd.
Downey, CA 90241
(310) 928-1341

David Streeter, DVM
Rolling Hills Animal Hospital
28916 S. Western Avenue
San Pedro, CA 90732
(310) 831-1209

Walter Rosskopf, DVM
Avian and Exotics
4871 W. Rosecrans Avenue
Hawthorne, CA 90250
310-679-0693

C. Jenner, DVM; A. Glasser, DVM
Rossmoor-El Dorada Animal Hospital
10832 Los Alamitos Blvd.
Los Alamitos, CA 90720
(310) 598-8621

Chris Cauble, DVM, B. Brunskill DVM
Center Animal Hospital
897 Silver Spur Road
Rolling Hills Estates, CA 90274
(310) 377-5548

Walter Holtan, DVM
Pet Medical Center
1534 14th Street
Santa Monica, CA 90403
(310) 393-8218

Gerry Citek, DVM
Norwalk Pet Care Clinic
12858 Pioneer Blvd.
Norwalk, CA 90650
(310) 863-3366

Southern California: 909 Area Code

Sherry Brothers, DVM
Highland Avenue Veterinary Clinic
1731 E. Highland Avenue
San Bernardino, CA 92404
(909) 889-0093

Michael Christenson, DVM
Robert Dolphin, DVM
West Riverside Veterinary Hospital
5488 Mission Blvd.
Riverside, CA 92509
(909) 686-2242

Richard Johnson, DVM
Central Veterinary Hospital
281 North Central Avenue
Upland, CA 91786
(909) 981-2855

Ann McDowell, DVM
Chaparral Pet Hospital
915A West Foothill
Claremont, CA 91711
(909) 625-1561

Louis Burch, DVM
Redlands Pet Clinic
404 E. Redlands Blvd.
Redlands, CA 92373
(909) 793-4775

Frank Crowder, DVM
Arlanza Animal Hospital
10194 Arlington
Riverside, CA 92503
(909) 354-2800

Roger Levoy, DVM
Baldy View Animal Hospital
1497 Foothill Blvd.
LaVerne, CA 92750
(909) 596-7771

Dr. Hong Park, DVM
Sunnymead Veterinary Clinic
24588 Sunnymead Blvd.
Moreno Valley, CA 92355
(909) 242-1561

Southern California: 714 Area Code

Kechen Chang, DVM
SeaGate Veterinary Hospital
160061 Bolsa Chica Road
Huntington Beach, CA 92649
(714) 846-4436

H. Kopit, DVM
Stanton Pet Hospital
8591 Katella
Stanton, CA 90680
(714) 828-5891

Patricia Pannier, DVM
Orange Olive Veterinary Hospital
2187 Orange-Olive Road
Orange, CA 92665
(714) 998-1510

Bob Knight, DVM
Tri-City Pet Hospital
145 S. Placentia Avenue
Fullerton, CA 92631
(714) 870-9090

Don Lundholm, DVM
Adams Pet Clinic
10130 Adams
Huntington Beach, CA 92646
(714) 946-1605

Gayle Roberts, DVM
Northwood Animal Hospital
13925 Yale Avenue, #115
Irvine, CA 92720
(714) 559-1992

Randy Strathman, DVM
Corona Community Animal Hospital
423 E. Grand Avenue
Corona, CA 91720
(714) 279-7387

Francine Sassin, DVM
Estrella Veterinary Hospital
25925 Camino del Estrella
Capistrano Beach, CA 92624
(714) 496-6661

Donald Tyler, DVM
Beach City Animal Hospital
7412 Warner Avenue
Huntington Beach, CA 92647
(714) 847-3523

K. G. Kali, DVM
North Tustin Veterinary Clinic
14081 S. Yorba, Suite 103
Tustin, CA 92680
(714) 838-7440

J. Pasco, DVM; J. Litvak, DVM
All Creatures Care Cottage
1912 Harbor Blvd.
Costa Mesa, CA 92627
(714) 642-7151

Scott Weldy, DVM
El Toro Animal Hospital
23162 El Toro Frontage Road
El Toro, CA 92630
(714) 837-5222

Southern Desert and San Diego Regions: 619 Area Code

Terry Hicks, DVM
Rodney Melchert, DVM
Palm Desert Animal Hospital
73120 Highway 111
Palm Desert, CA 92260
(619) 568-9377

David Judy, DVM
Judy Veterinary Clinic
1764 N. 2nd Street
El Cajon, CA 92021
(619) 499-3500

Gary Gallerstein, DVM
Acacia Animal Hospital
1326 Mission Road
Escondido, CA 92027
(619) 745-8115

Douglas MacDonald, DVM
Helix Pet Hospital
4223 Palm Avenue
La Mesa, CA 91941
(619) 469-2129

Michael Clark, DVM
San Diego Pet Hospital
7086 Broadway
Lemon Grove, CA 91945
(619) 462-6600

Ellen Gregory, DVM; Kim Osborn, DVM
AAA Animal Hospital
1280 3rd Avenue
Chula Vista, CA 91911
(619) 420-6423

Warren Shetrone, DVM
San Dieguito Veterinary Hospital
195 N. El Camino Real
Encinitas, CA 92024
(619) 753-9124

Rick Abrahams, DVM
Del Norte Plaza Veterinary Clinic
306-F El Norte Parkway
Escondido, CA 92026
(619) 741-8387

Robert Larsson, DVM
University Animal Clinic
7134 University Avenue
La Mesa, CA 91941
(619) 463-9861

Robert Cartin, DVM
Mission Animal & Bird Hospital
3308 Mission Avenue
Oceanside, CA 92056
(619) 433-3763

David Kenney, DVM
Animal Medical Hospital
14031 Poway Road
Poway, CA 92064
(619) 271-9711

Jeffrey Jenkins, DVM
Avian & Exotic Animal Hospital
2317 Hotel Circle S. #C
San Diego, CA 92108
(619) 260-1412

Bob Smart, DVM
Genessee Bird and Pet Clinic
5621 Balboa Avenue
San Diego, CA 92117
(619) 278-1575

Patricia Carter, DVM
Rancho Mesa Animal Hospital
8710 Miramar Road
San Diego, Ca 92126
(619) 566-0422

Ronald Ridgway, DVM and Associates
North Park Veterinary Hospital
4054 Normal Street
San Diego, CA 92103
(619) 299-6020

Rosanne Brown, DVM
Ranch San Diego Animal Hospital
10761-A Jamacha Blvd
Spring Valley, CA 91977
(619) 660-6767

Northern California: 408, 415, 510, and 916 Area Codes

Fredric Frye, DVM
El Macero Veterinary Clinic
417 Mace Blvd, Suite C
Davis, CA 95616
(916) 756-6764

Veterinary Medical Teaching Hospital
University of California
Davis, CA 95616
(916) 752-1393

Mark Handel, DVM
Palomar Animal Hospital
2615 S. Santa Fe Avenue
San Marcos, CA 92069
(619) 727-7622

Harjot Gill, DVM
Camino Santa Fe Pet Clinic
6755 Mira Mesa Blvd.
San Diego, CA 92126
(619) 457-5111

Deborah Harvazinski, DVM
Pacific Beach Veterinary Clinic
1362 Garnet Street
San Diego, CA 92109
(619) 272-6255

S. Clemmensen, DVM; A. Edmiston
Paradise Valley Road Pet Clinic
8360 Paradise Valley Road
Spring Valley, CA 91977
(619) 475-9770

Geoffery Smith, DVM
Bregle Terrace Animal Hospital
971 Vale Terrace
Vista, CA 92804
(619) 758-8004

John Elliott, DVM
Elk Grove Veterinary Hospital
8640 Elk Grove Blvd.
Elk Grove, CA 95624
(916)-685-9589

Mark Madden, DVM
Bascomb Animal Hospital
2175 S. Bascomb Avenue
Campbell, CA 95008
(408)-371-5630

Marlene Martin, DVM
5622 Huntington Avenue
Richmond, CA 94804
(510)-529-0777 (w)
(510)-524-2822 (h)

D. Lagerwerff, DVM
Animal Doctors
2061 Avy Avenue
Menlo Park, CA 94070
(415) 854-1343

Elaine Salinger, DVM
Whyte-Ivie Pet Hospital
1111 El Camino
San Bruno, CA 94066
(415) 583-5039

BLM LIBRARY
SC-653, BLDG. 50
DENVER FEDERAL CENTER
P. O. BOX 25047
DENVER, CO 80225-0047

88027933

ER'S CARD

B477 1993 c.2

estions about
pises

OFFICE	DATE RETURNED

(Continued on reverse)

United States
Department of the Interior

Bureau of Land Management
California Desert District
6221 Box Springs Boulevard
Riverside, CA 92507-6723

OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE, \$300

BULK RATE
Postage and Fees Paid
U.S. Department of the Interior
Permit G-76